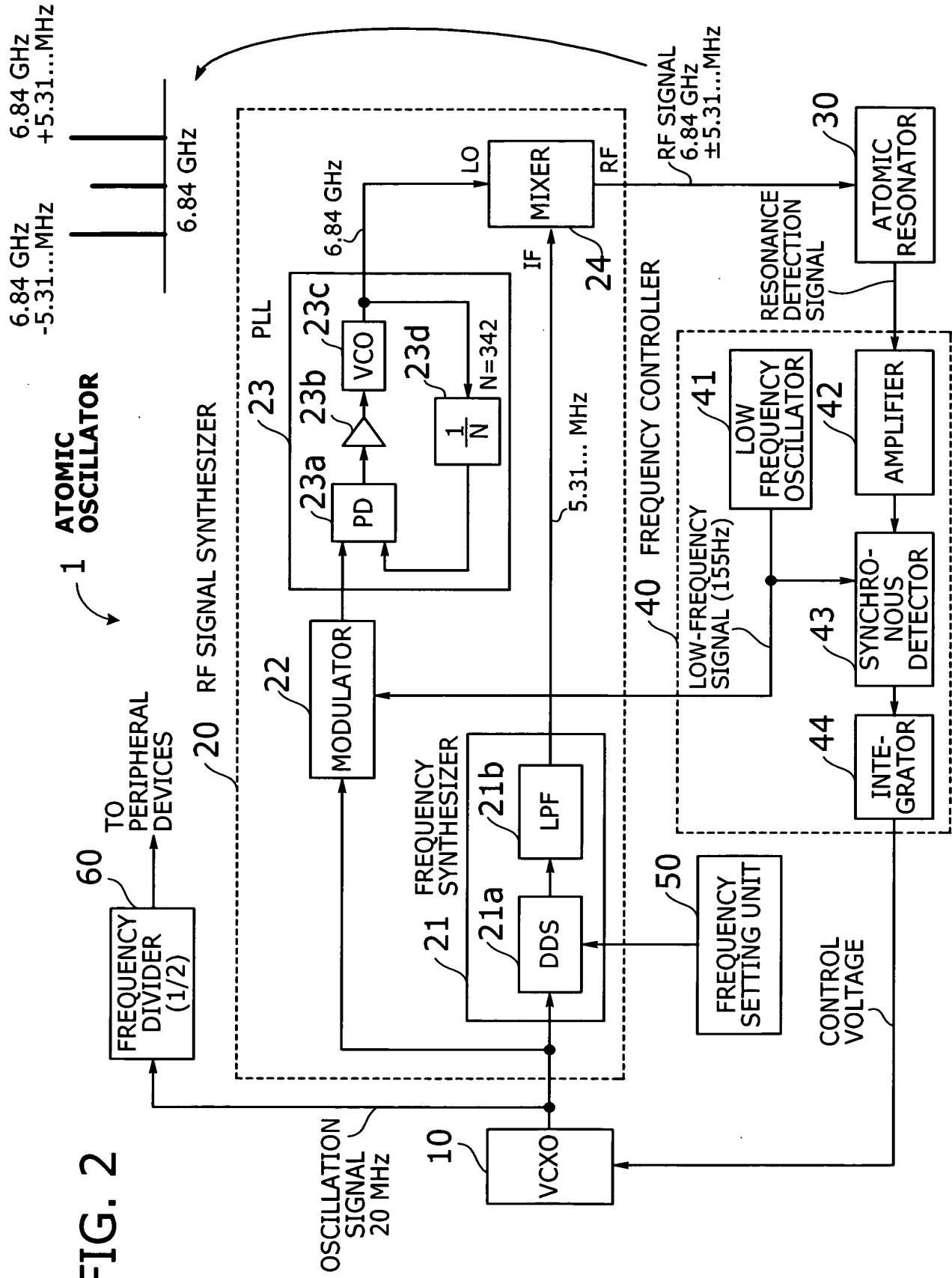


FIG. 1

FIG. 2



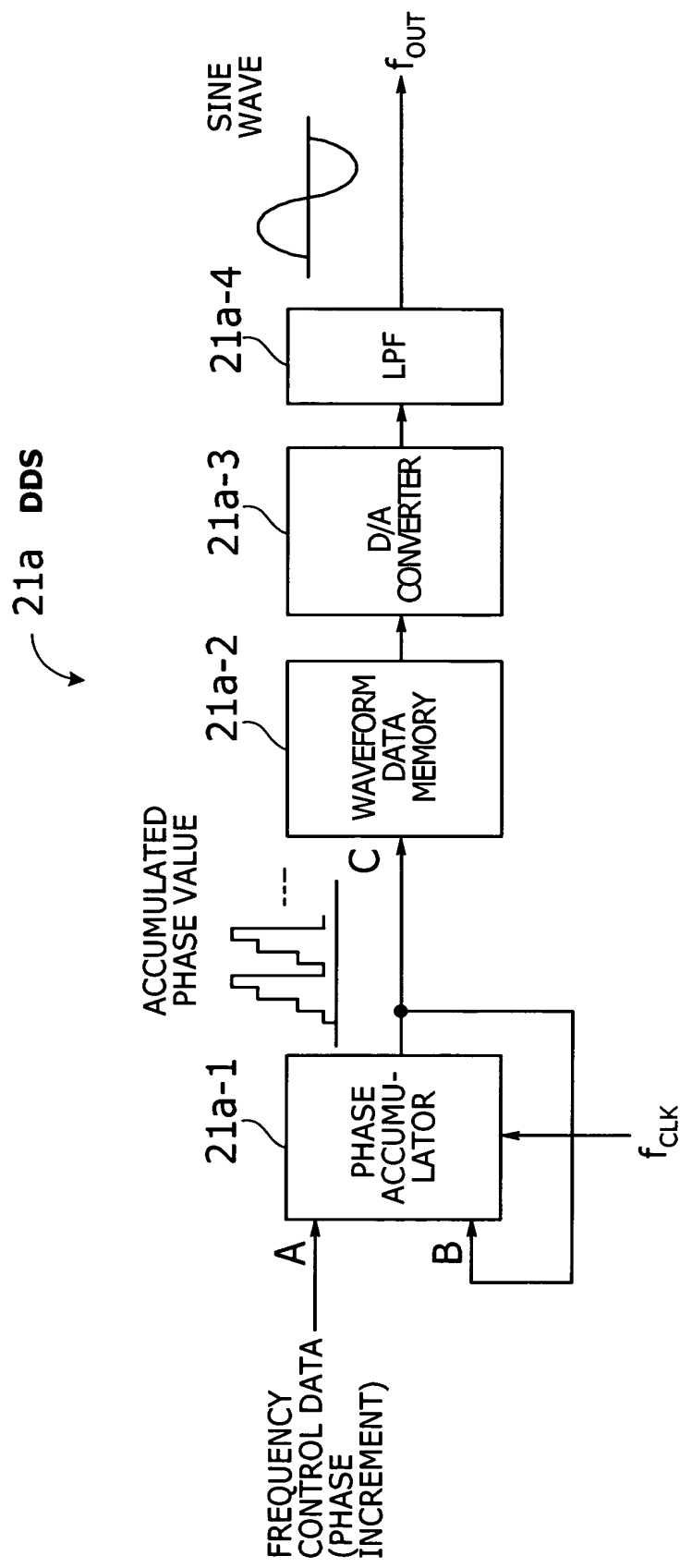


FIG. 3

T1
↙

| CLOCK COUNT | ACCUMULATED PHASE OUTPUT | | | | |
|----------------|--------------------------|-----------|-----------|-----------|---------|
| | BIT #3 | BIT #2 | BIT #1 | BIT #0 | DECIMAL |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 | 1 | 3 |
| 2 | 0 | 1 | 1 | 0 | 6 |
| 3 | 1 | 0 | 0 | 1 | 9 |
| 4 | 1 | 1 | 0 | 0 | 12 |
| 5 | 1 | 1 | 1 | 1 | 15 |
| 6 | 0 | 0 | 1 | 0 | 2 |
| 7 | 0 | 1 | 0 | 1 | 5 |
| 8 | 1 | 0 | 0 | 0 | 8 |
| 9 | 1 | 0 | 1 | 1 | 11 |
| 10 | 1 | 1 | 1 | 0 | 14 |
| 11 | 0 | 0 | 0 | 1 | 1 |
| 12 | 0 | 1 | 0 | 0 | 4 |
| 13 | 0 | 1 | 1 | 1 | 7 |
| 14 | 1 | 0 | 1 | 0 | 10 |
| 15 | 1 | 1 | 0 | 1 | 13 |
| 16 | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 1 | 1 | 3 |
| 18 | 0 | 1 | 1 | 0 | 6 |
| 19 | 1 | 0 | 0 | 1 | 9 |

FIG. 4

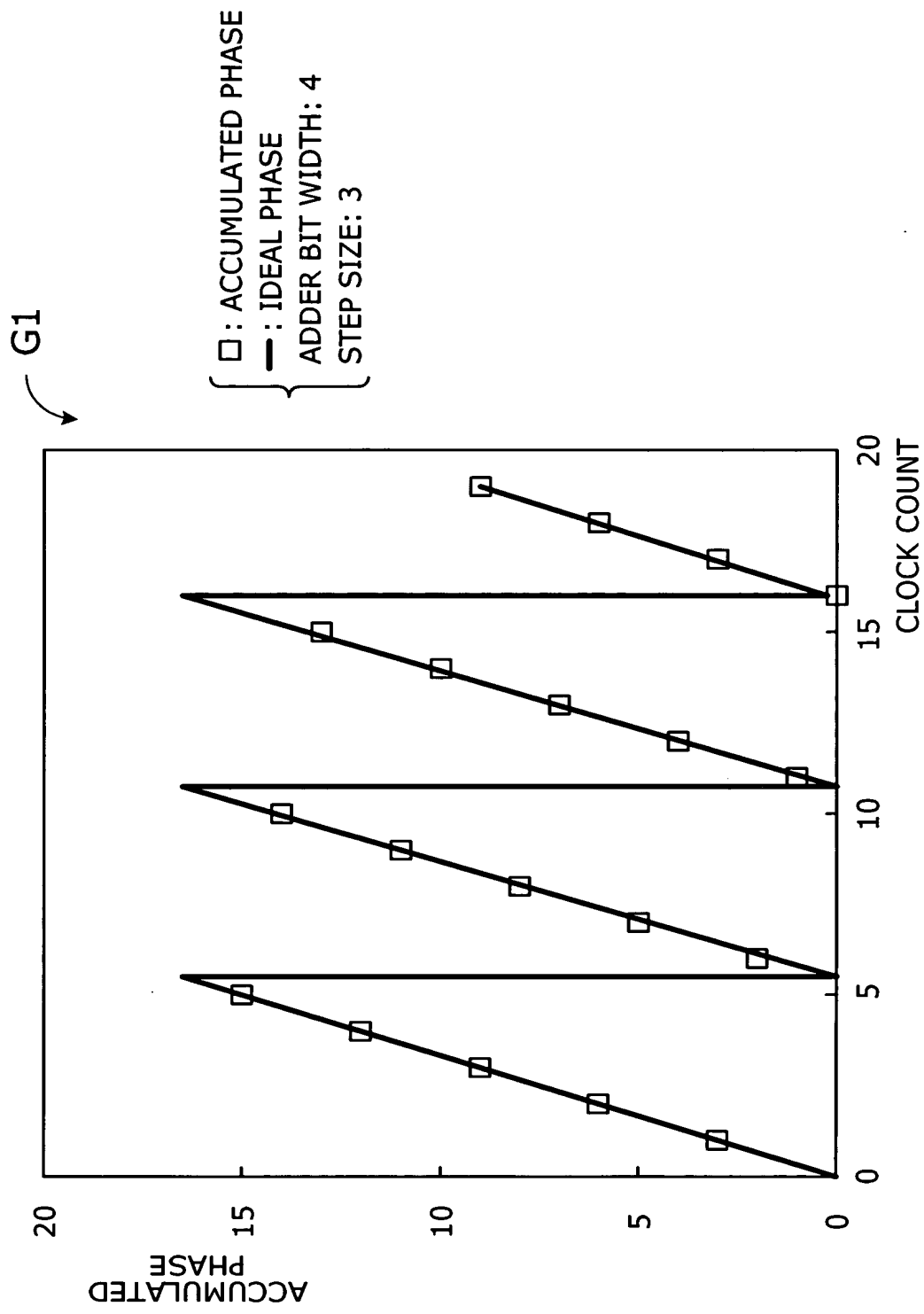


FIG.5

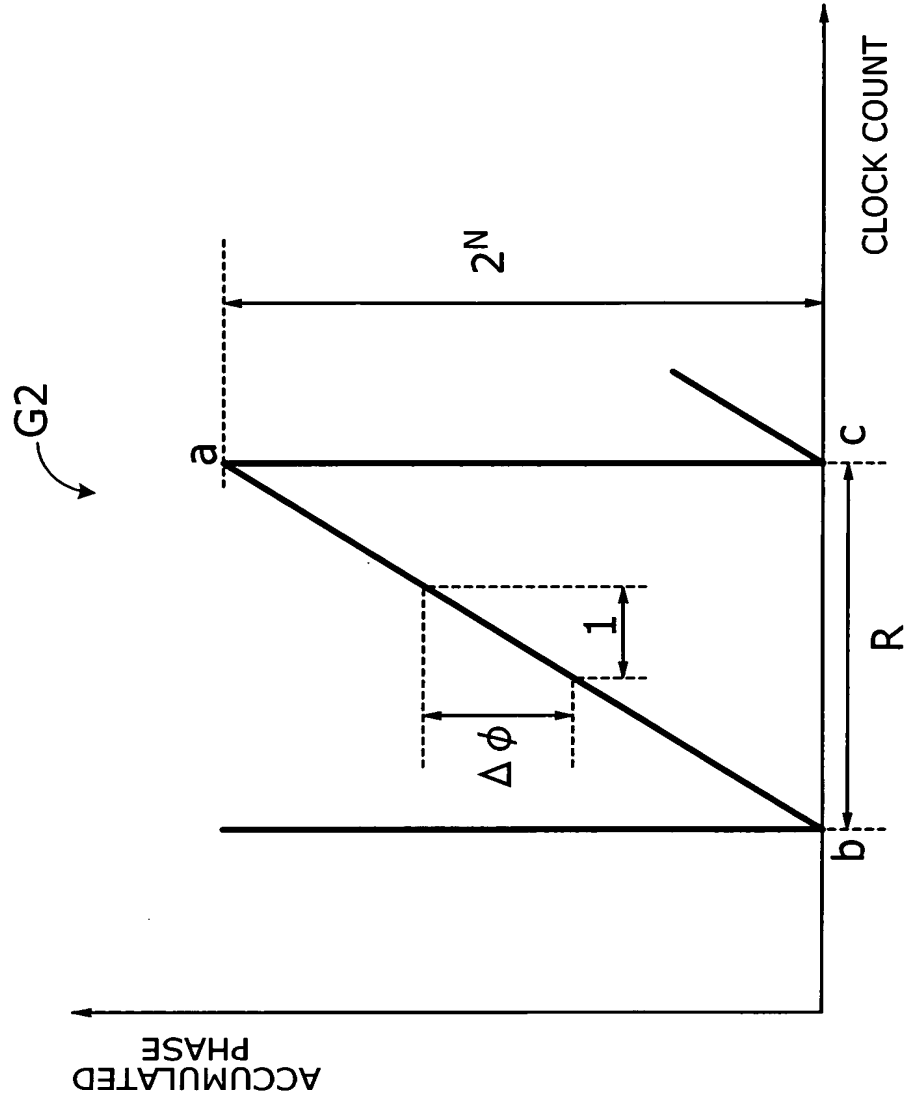


FIG. 6

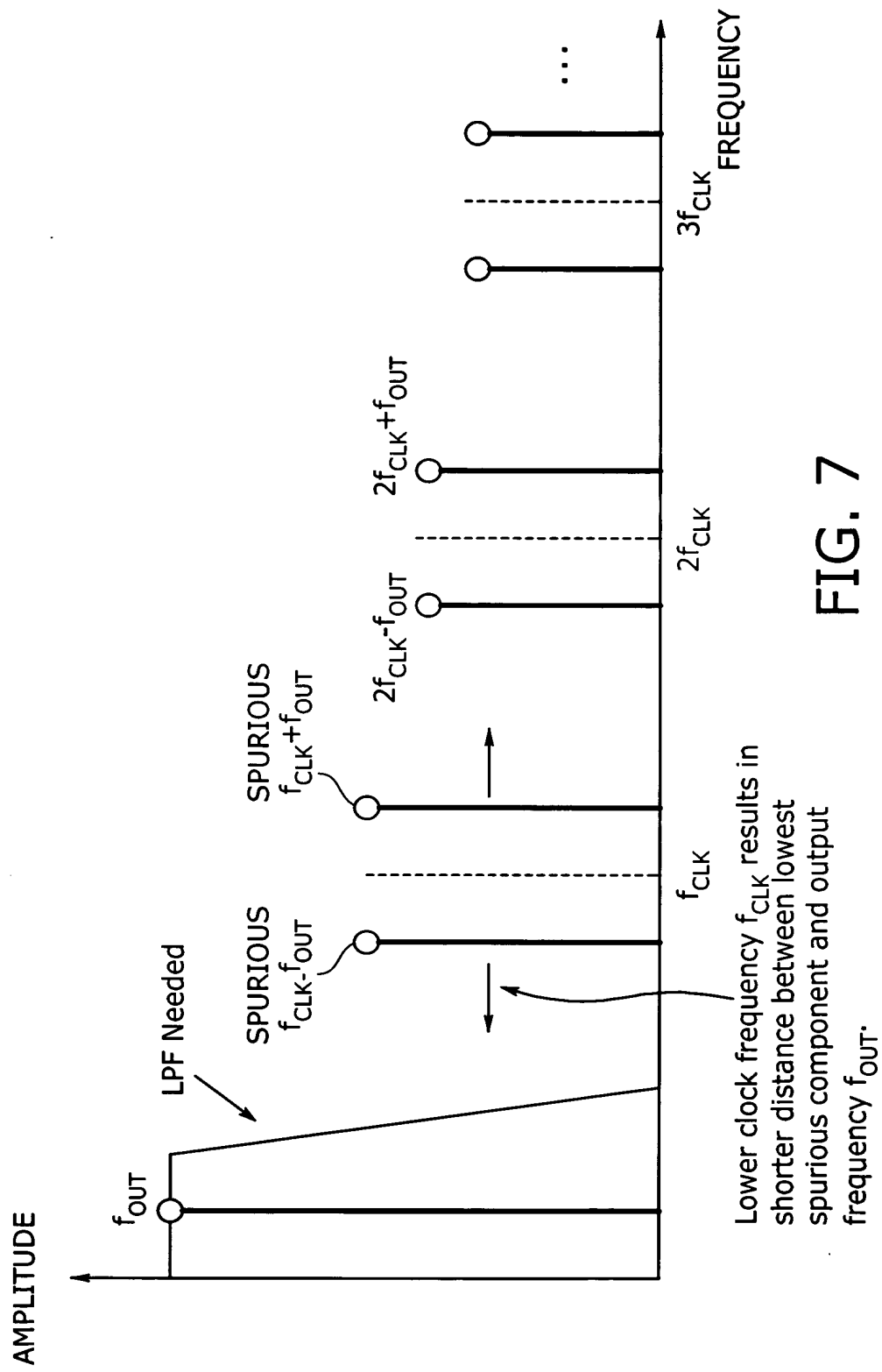


FIG. 7

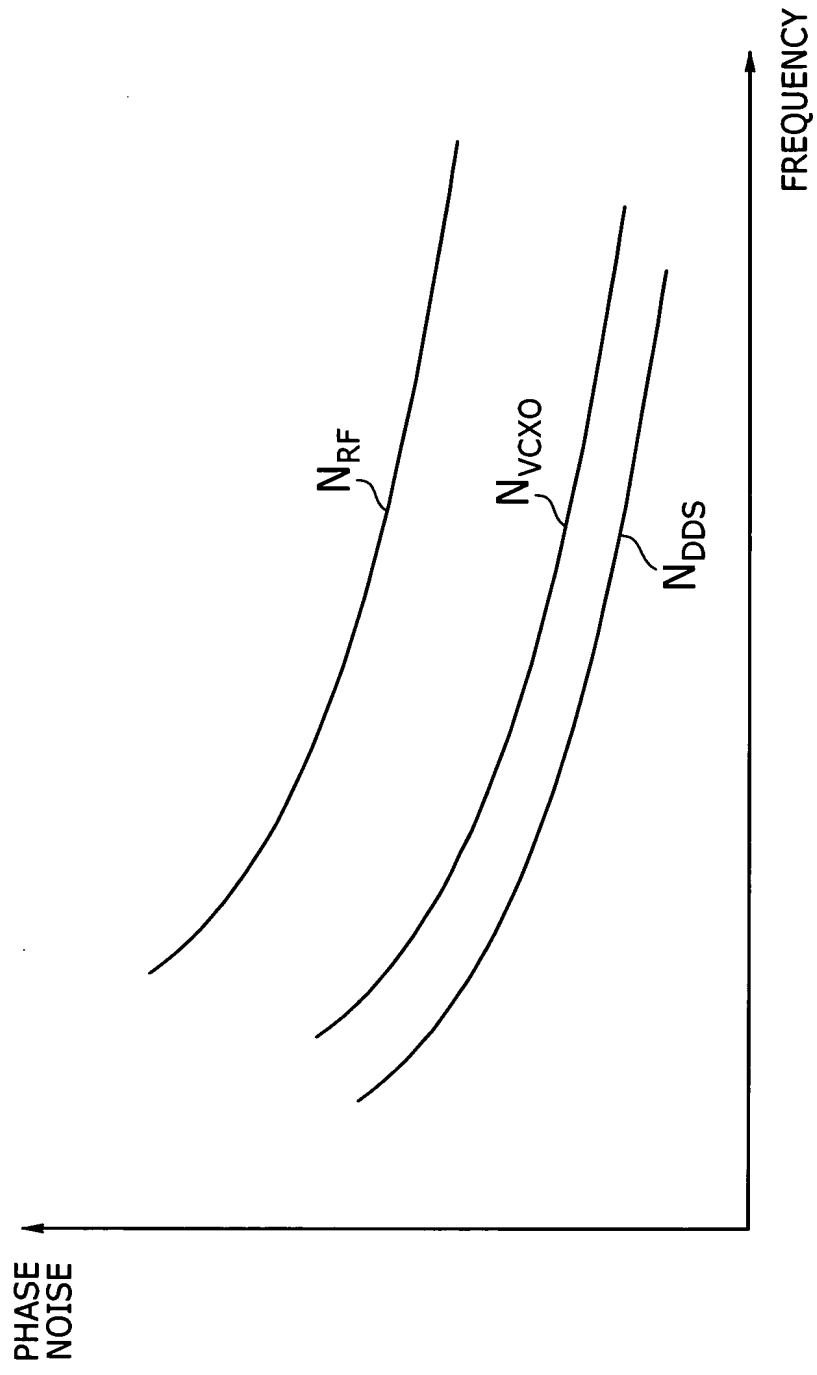


FIG. 8
PRIOR ART

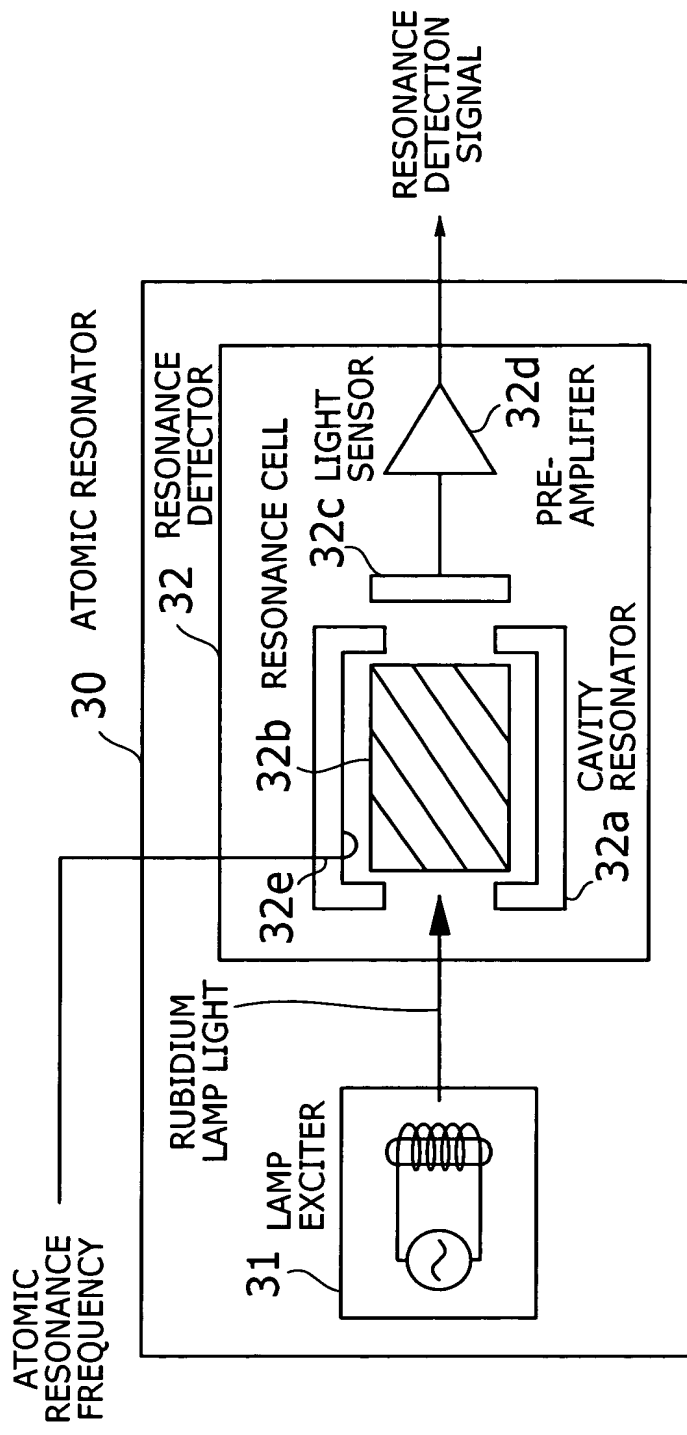


FIG. 9

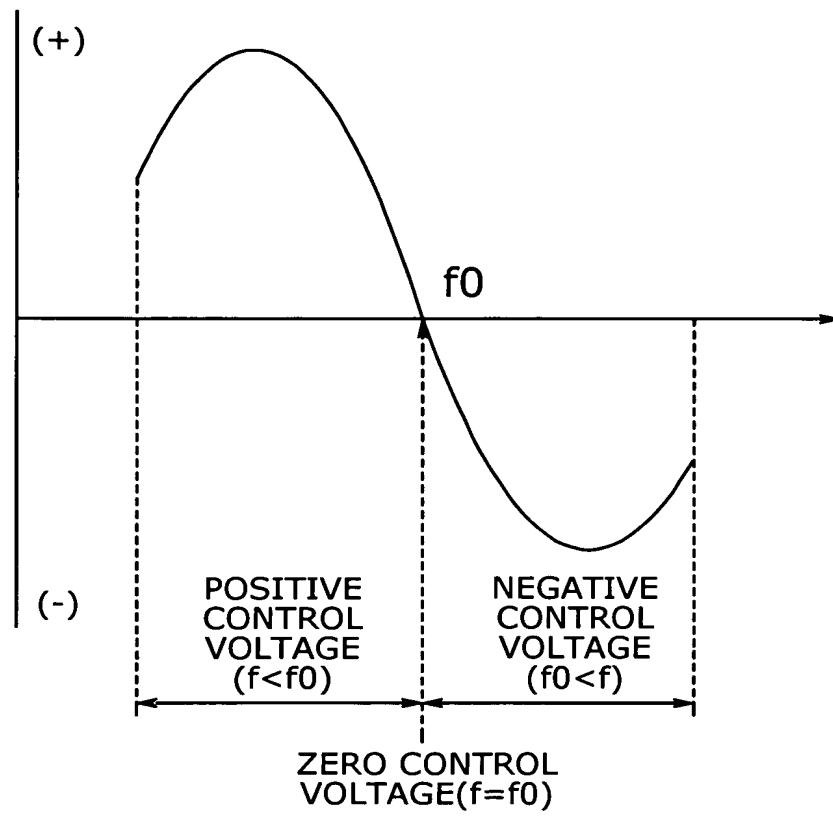
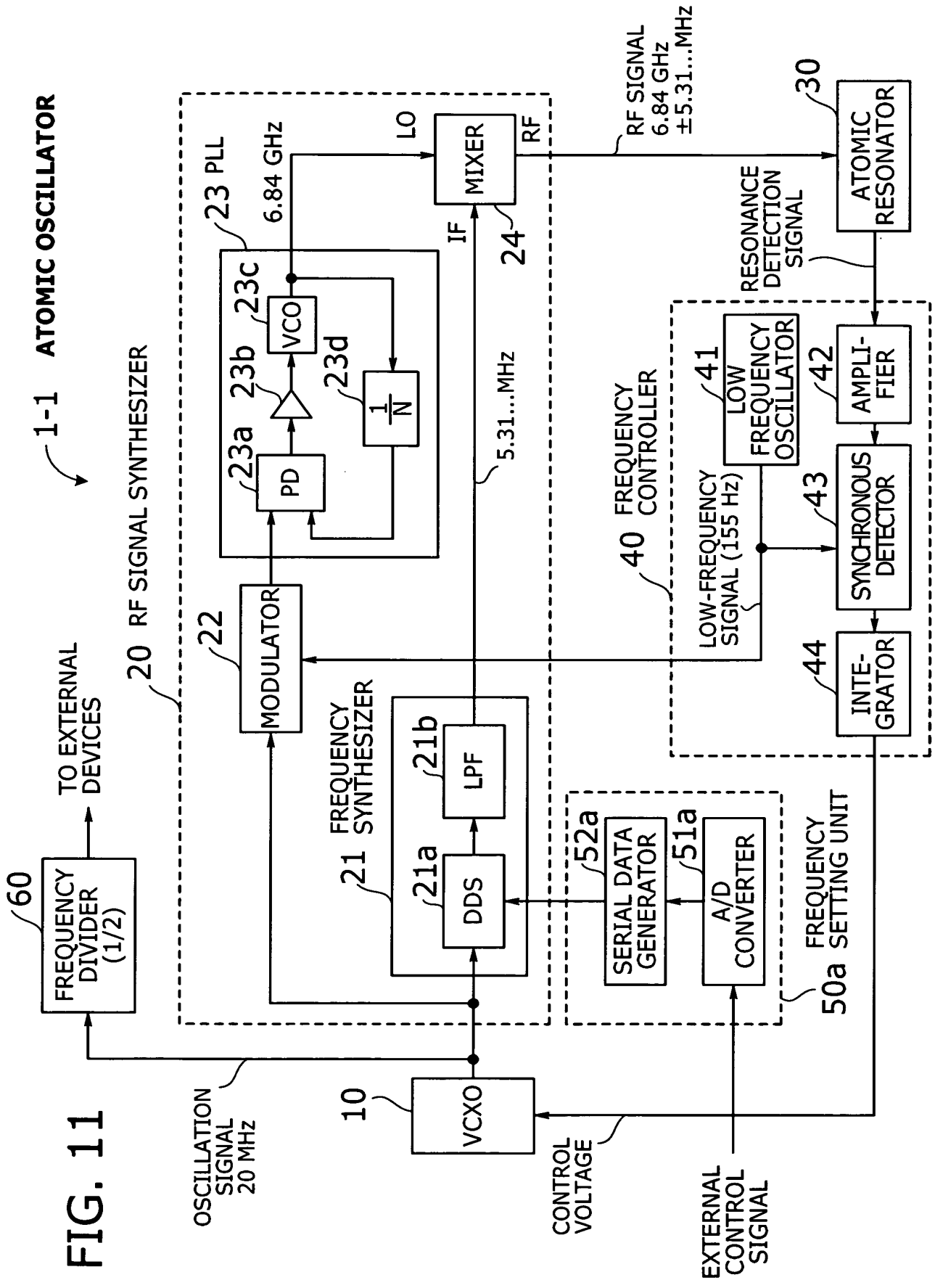
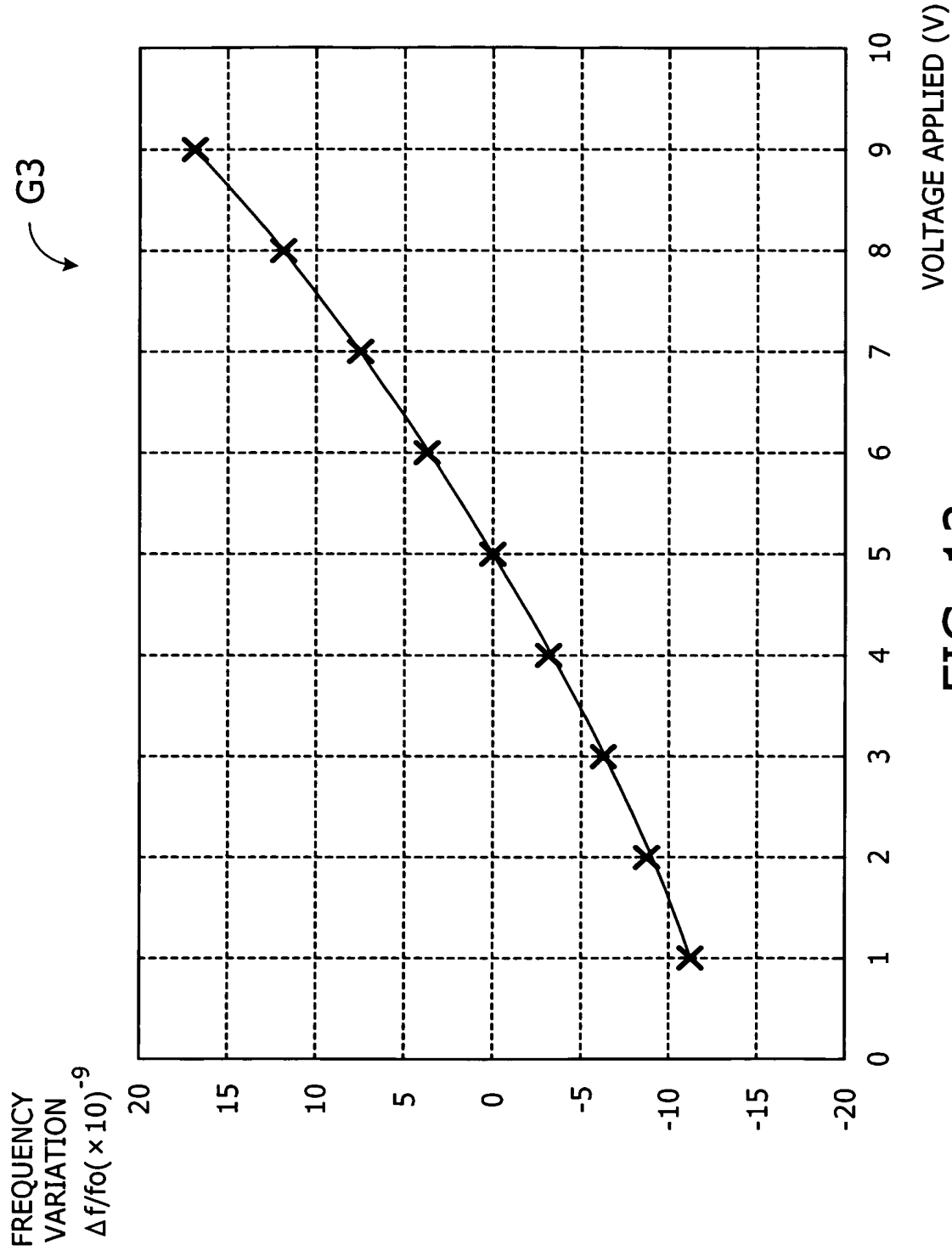


FIG. 10





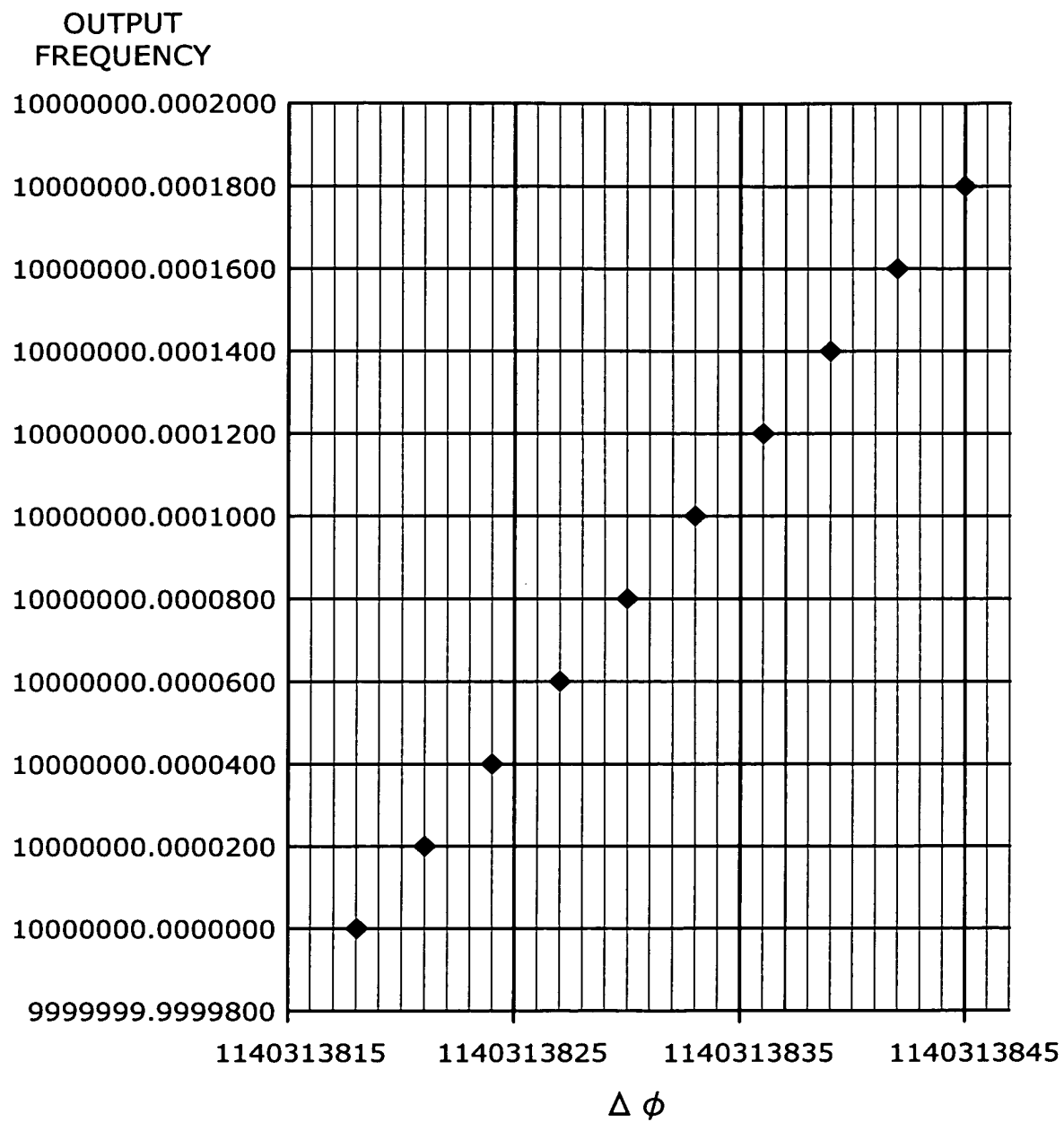


FIG. 13

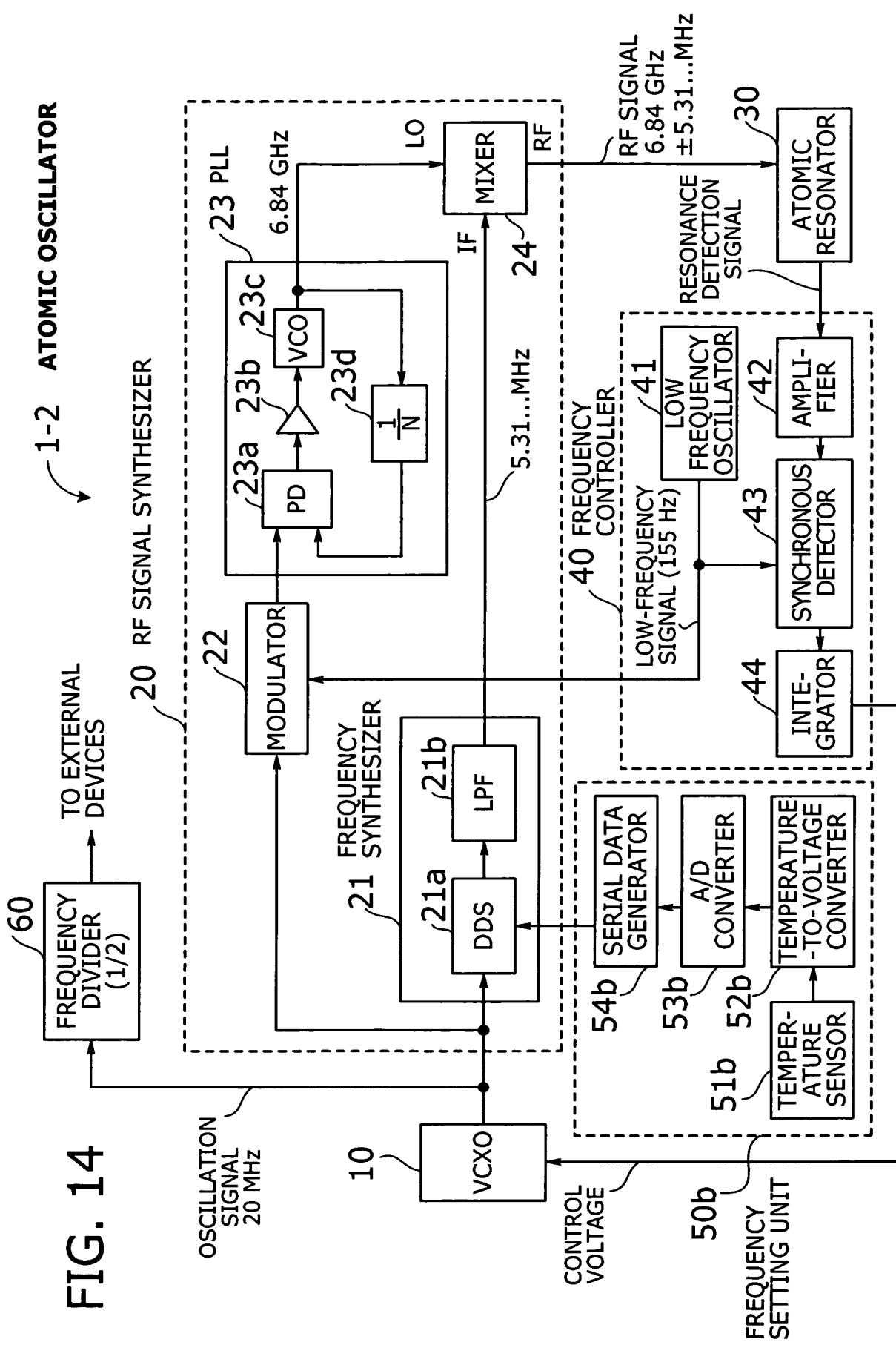
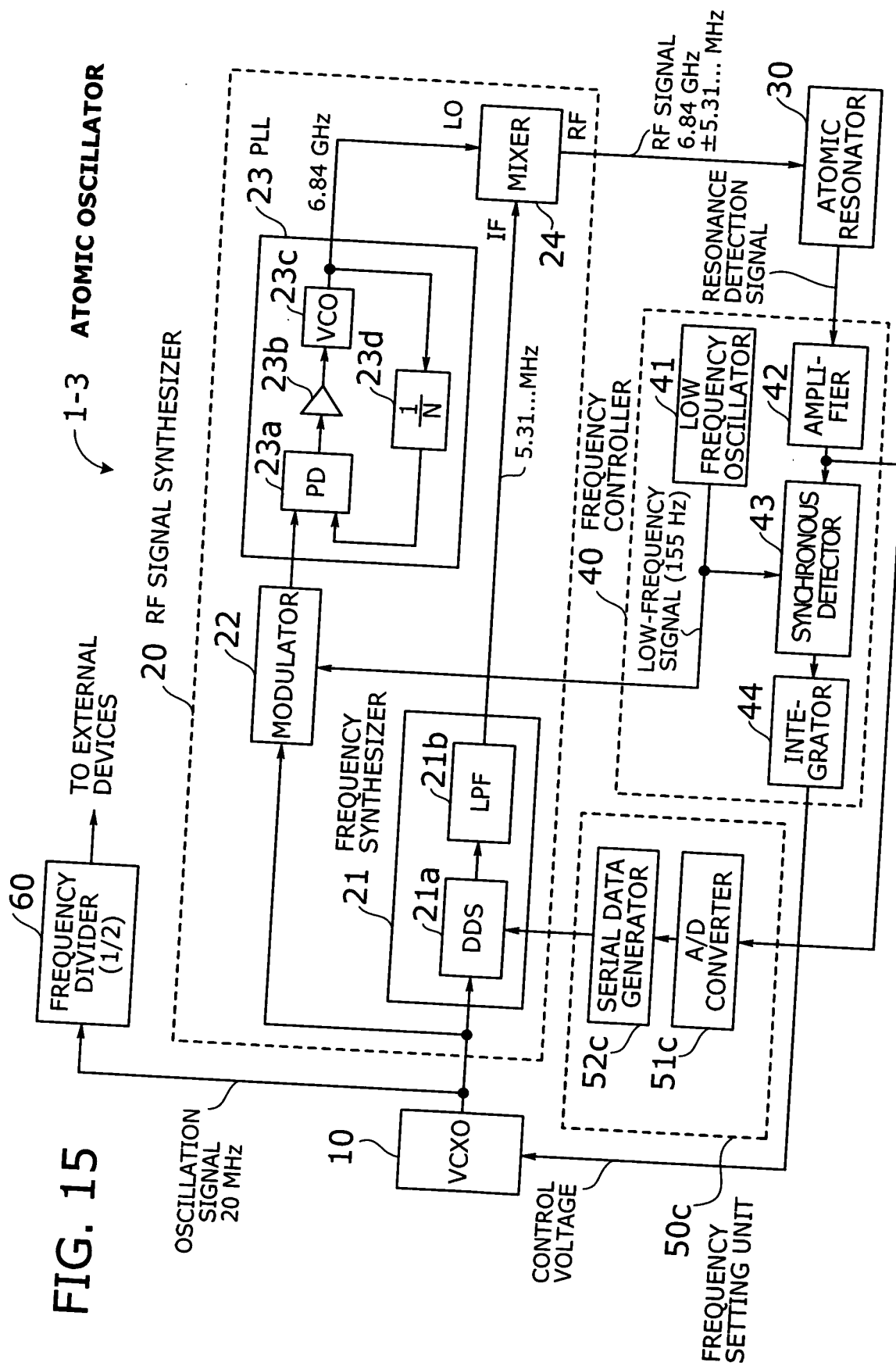


FIG. 15



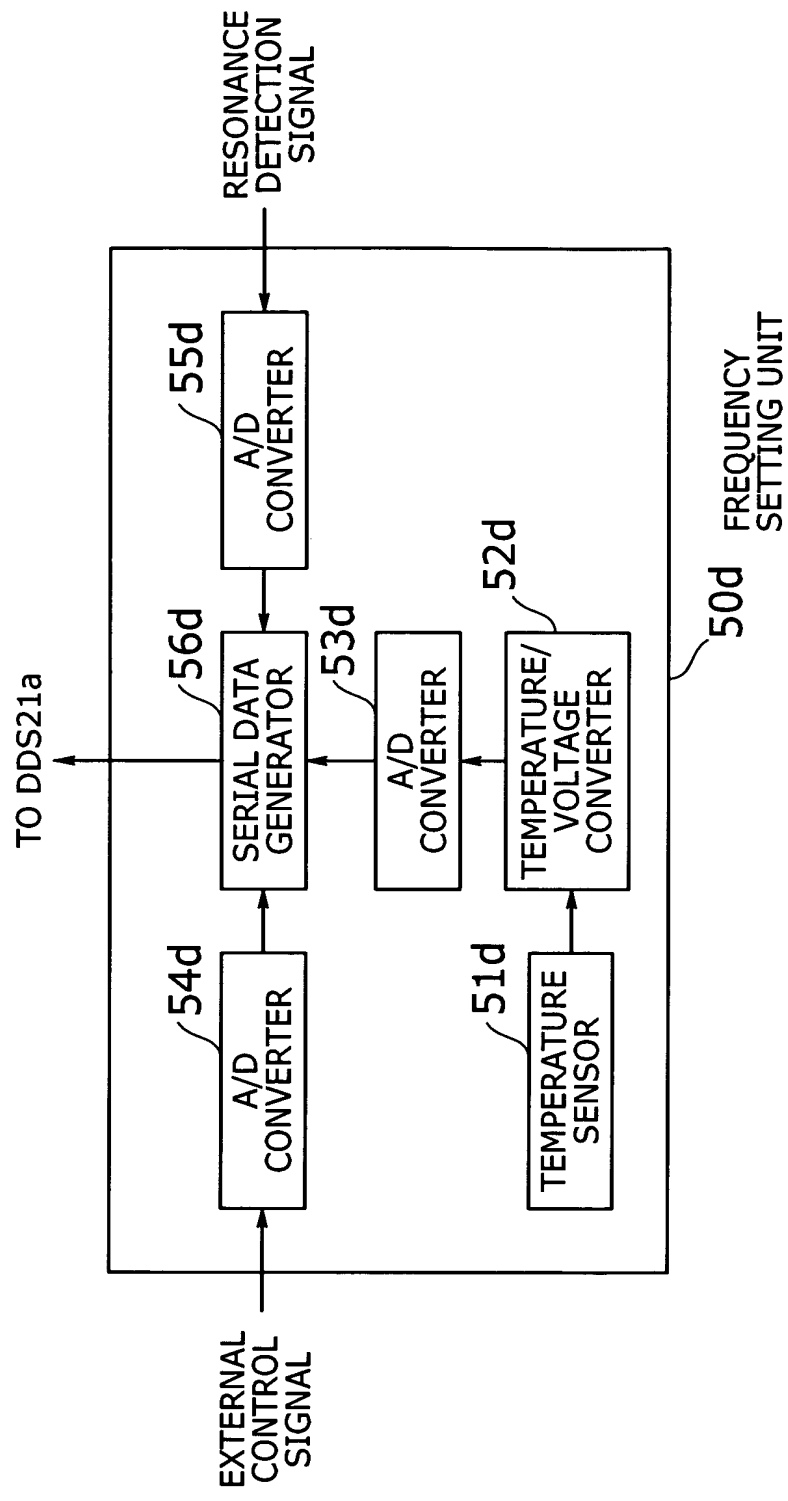
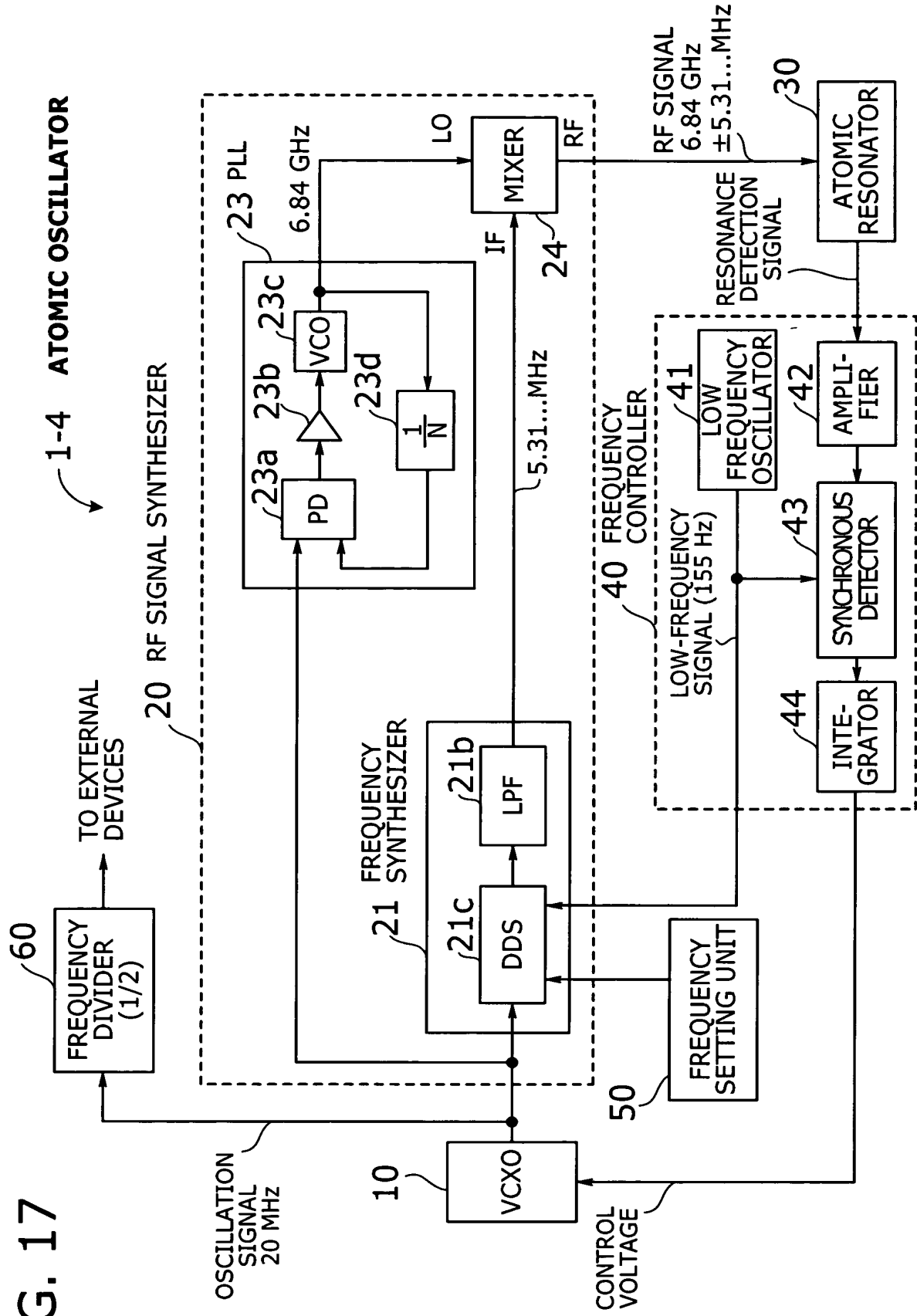


FIG. 16

FIG. 17



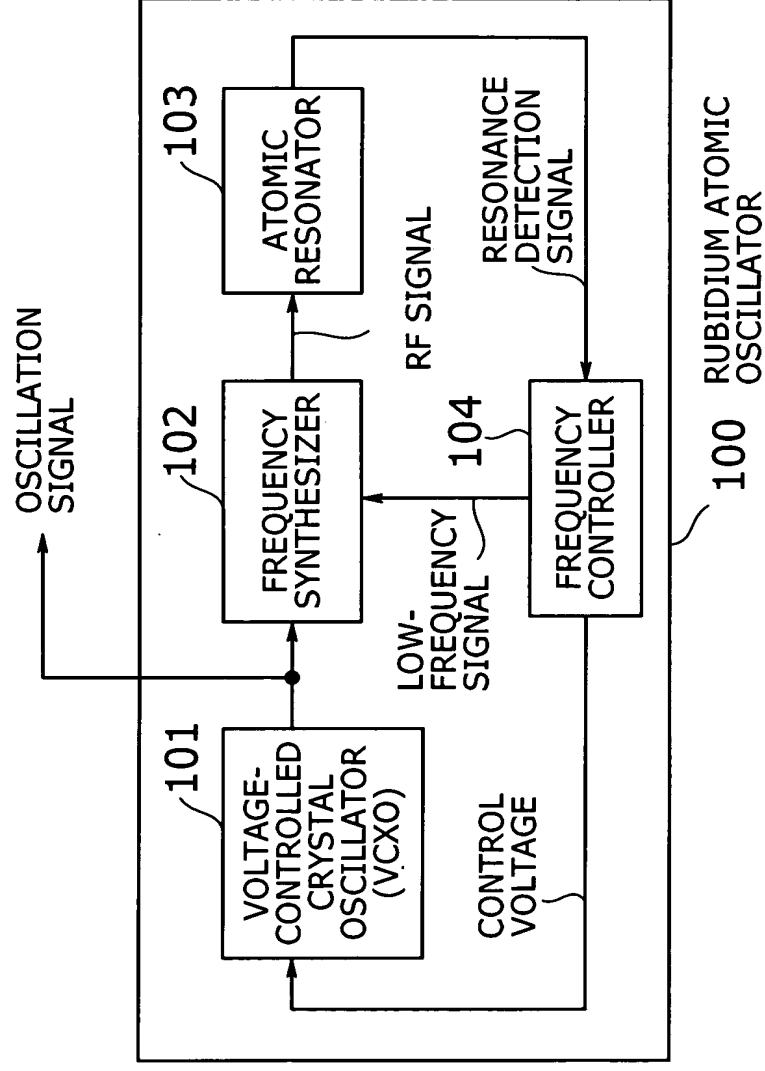


FIG. 18

PRIOR ART

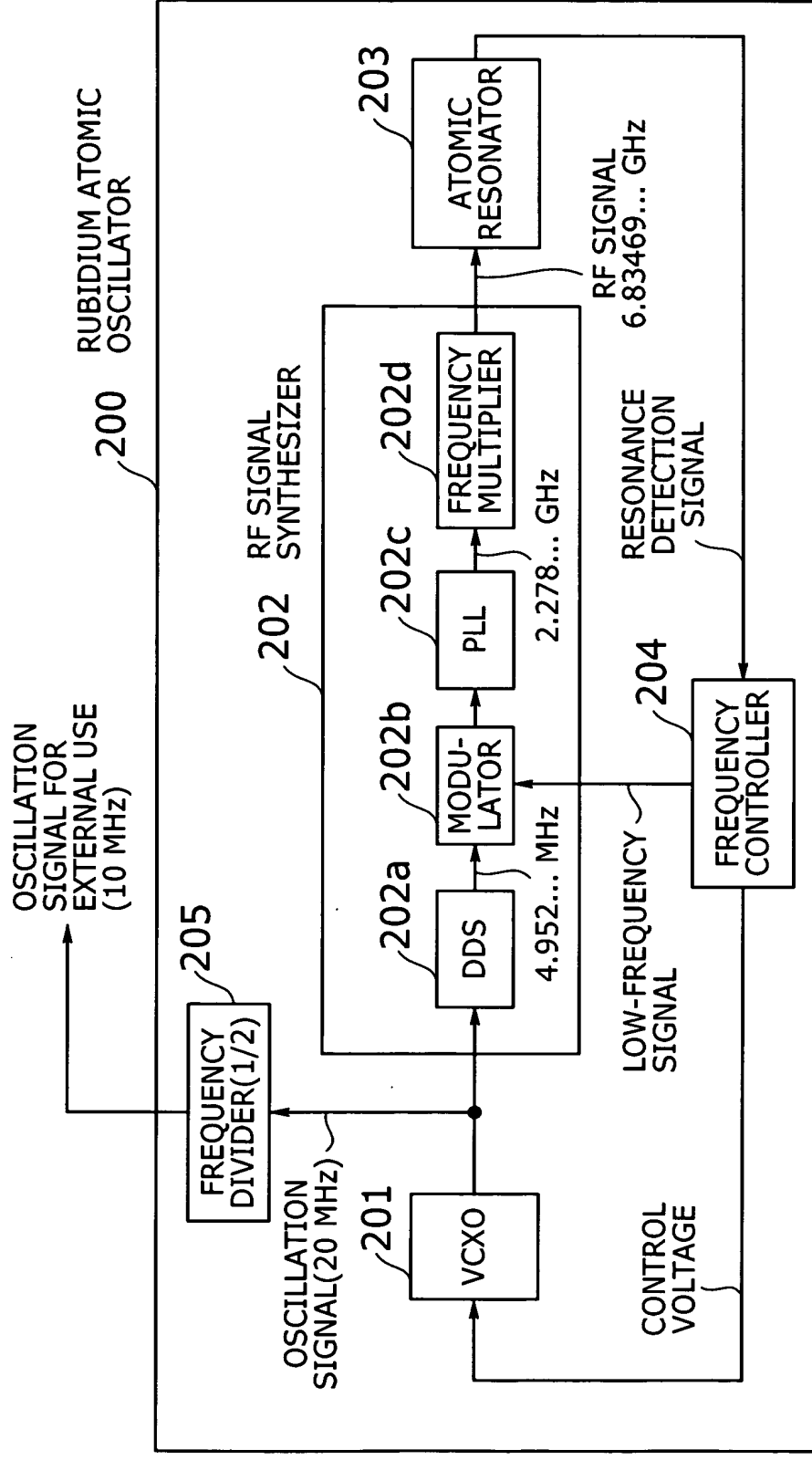


FIG. 19
PRIOR ART